DOCUMENT RESUME

ED 363 645 TM 020 668

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TITLE	Strategies for Including All Students in National and State Assessments: Lessons from a National Longitudinal Study.
INSTITUTION	National Opinion Research Center, Chicago, Ill.
SPONS AGENCY	National Center for Education Statistics (ED), Washington, DC.
PUB DATE	Jun 93
CONTRACT	300-86-0010; RS8800-30001; RS90005001
NOTE	29p.; Paper presented at the National Conference on Large-Scale Assessment of the Council of Chief State School Officers (Albuquerque, NM, June 10, 1993). Portions are based on the National Education Longitudinal Study of 1988 (NELS:88) conducted for the National Center for Education Statistics by the National Opinion Research Center at the University of Chicago, Illinois.
PUB TYPE	Reports - Evaluative/Feasibility (142) -- Speeches/Conference Papers (150) -- Tests/Evaluation Instruments (160)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Attrition (Research Studies); *Disabilities; *Educational Assessment; Educational Change; Elementary Secondary Education; Eligibility; Limited English Speaking; *Longitudinal Studies; National Surveys; Research Design; *Research Methodology; Research Problems; *Sampling; Special Education; State Programs; Statistical Bias; *Student Participation; Test Bias; Testing Programs
IDENTIFIERS	Early Childhood Longitudinal Survey; *National Education Longitudinal Study 1988

ABSTRACT

Recent investigations of the extent to which students with disabilities are allowed to participate in major national data collections used in measurement-driven education reform suggest that 40 to 50 percent of students with disabilities are typically excluded from major assessments, although they are included to a greater degree in assessments that do not require completion of cognitive tests. The problem is one of accurate statistical reporting and modeling educational processes and phenomena. Exclusion issues are examined in the longitudinal perspective of the National Education Longitudinal Study of 1988 (NELS:88), using data from the base year and follow-up studies. It is recommended that educational longitudinal studies be designed so that they will map the school careers of learning disabled, physically handicapped, and limited English proficiency students in such a way that clear evaluation can be made of these children's integration and progress. The upcoming study of the kindergarten cohort of the Early Childhood Longitudinal Survey offers the opportunity to improve past survey and assessment practice. What eliminating exclusion can mean to this study is described. One figure and two tables illustrate the analysis. An appendix contains screening documents for the NELS:88. (Contains 34 references.) (SLD)

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Strategies for Including All Students in National and State Assessments: Lessons From a National Longitudinal Study

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Paper presented at the **National Conference on Large-Scale Assessment** of the Council of Chief State School Officers, Albuquerque, New Mexico, June 10, 1993. Presented in Session 38, *Strategies for Including All Students in National and State Assessments*; James Ysseldyke (chair), Steven Ingels, Ed Reidy, Charles Wiley and Martha Thurlow (presenters).

Portions of this paper are based on the National Education Longitudinal Study of 1988 (NELS:88), sponsored by the National Center for Education Statistics (NCES), Office of Educational Research and Improvement, U.S. Department of Education. NELS:88 is conducted for NCES by the National Opinion Research Center (NORC) at the University of Chicago. Dr. Jeffrey A. Owings was the NCES Project Officer for the NELS:88 Base Year; Dr. Shi-Chang Wu is the NCES Project Officer for the first follow-up; Peggy Quinn is the NCES Project Officer for the second follow-up. The ideas and opinions expressed in this paper are those of the author and do not necessarily represent positions or conclusions endorsed by NCES.

NORC Projects 4455, 4492, 4521; NCES Contracts 300-86-0010; RS8800-30001; and RS90005001.

TM020668

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1. *THE PROBLEM: EXCLUSION OF HANDICAPPED AND LANGUAGE MINORITY STUDENTS FROM NATIONAL TESTING PROGRAMS*

Recent investigations of the extent to which students with disabilities are allowed to participate in major national data collection programs thought to play a pivotal role in measurement-driven educational reform suggest that 40-50 percent of students with disabilities are typically excluded from major assessments, though students with disabilities are included to a greater degree in data collections that do not require the completion of cognitive tests (McGrew, Thurlow, Shriner, & Spiegel, 1992; McGrew, Thurlow, & Spiegel, 1993). Additional numbers of students are excluded from assessments or other state and national education data collection programs owing to language barriers to participation.

Policy Analysis Implications: General. In 1988, for example, just over 5 percent of eighth graders were excluded from the National Assessment of Educational Progress (NAEP) and from the NELS:88 base year. Although these exclusion rates may be low compared to many other studies, and it may appear that only a small proportion of the potential sample has been excluded, this undercoverage may affect national estimates if those excluded differ in the distribution of key characteristics from those who are included. Such a systematic difference is seen, for example, in dropout rates.[1] Two years later, the eighth graders excluded by NELS:88 in the base year apparently had dropped out of school at several times the average rate. Hence, despite their small numbers, undercoverage of such groups may nevertheless affect key national estimates such as rates of dropping out of school, or of the proportion of individuals who complete high school in four years. Since these estimates are employed to draw inferences about and make policy decisions concerning elementary and secondary education, statistical undercoverage bias may lead to policy bias.

Policy Analysis Implications: Group-Specific. Additionally, subgroup estimates may be particularly affected. If, for example, as is the case, Hispanic students are disproportionately excluded, power to generalize about the educational situation of Hispanics is diminished. Indeed, the excluded groups are of high policy interest--handicapped students and students with limited or no English proficiency are especially important categories of students to gather data about. If a survey suffers from significant undercoverage of these groups, this undercoverage impedes the capacity of the database to support statistical reporting (or causal modeling) of educational phenomena for the group in question. While the proportion of eighth graders excluded overall in the NELS:88 base year (or the 1988 NAEP) may seem small, it constitutes a very large proportion of these policy-relevant subgroups. For example, in connection with students with physical and mental disabilities, over a third of the potential sample of handicapped students (36 percent, per the estimate of McGrew, Thurlow, & Spiegel, 1993) were declared ineligible to participate in the NELS:88 base year. Inability to generalize about the nation's 4.8 million disabled students and 6.3 million limited-English-proficient students is a major shortcoming for any comprehensive education database.

Research Analysis Implications. The problem is not just one of accurate statistical reporting but also one of modeling educational processes and phenomena. Let us take as an example research

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[1]While some categories of special education/IEP students have very low dropout rates, dropout rates for students with mild disabilities are much higher than the general population. This is especially the case for students with emotional disturbance (see National Council on Disability, 1993). LEP exit rates are also high (Bean and Tienda, 1987).

into dropping out of school. If, for example, being limited in one's English proficiency, or having a learning disability, is a major risk factor for dropping out of school, excluding a substantial proportion of such students from studies of the causes and consequences of dropping out is to exclude information that is critical to understanding the dynamics of school-leaving behavior.

The exclusion problem, moreover, is likely to grow in size in the future rather than to lessen. The number of students with limited or no English proficiency is growing. Immigration is at an all time high, with nearly one million legal and illegal immigrants entering the United States each year. This influx is expected to increase throughout the 1990s. Data from the 1990 Decennial Census indicate that between 1980 and 1990 the number of Americans speaking a foreign language at home increased from 23.1 million to 31.8 million, of whom over 17 million are Spanish-speaking (U.S. Census Bureau, 1993).[2] While at some points in the past handicapped children might have been studied as a separate group within specialized schools, "mainstreaming" has been a major trend of recent years; at present only about 7 percent of the disabled student population receives services through separate facilities (McGrew, Thurlow, & Spiegel, 1993). Currently contemplated legislation may in coming years require that children with severe disabilities be served in regular classroom settings. If such students can be served in regular classrooms, one might argue that it should be possible to include such students in the national testing programs that seek to measure student learning. Exclusion from assessment is difficult to defend given an environment of inclusion in regular classroom learning settings. In such a setting, the special interventions or mediations required to assess a disabled or limited English language proficient (LEP) student--translation to the student's mother tongue, reading to the student or taking dictation, use of visual aids, providing access to a two language dictionary, providing forms in enlarged print, simplifying the language in directions, using visual magnification or sound amplification devices--are likely to be much the same as are required to successfully teach that individual.

Validity and Reliability of Eligibility Criteria. *How "valid" are exclusion rules*? Spencer (1991, p.46) notes in connection with NAEP specifically but in a comment that has wider generalizability that "Currently practical testing considerations (who is easy to test) determines who gets tested....Granted, there are practical difficulties in assessing IEP[3] and LEP students but to simply exclude them from the population to whom inferences are being made seems inconsistent." If, however, one thinks of special education and English as a second language instruction as having their own special set of measurable educational outcomes, traditional exclusion policies might appear to have some rationale beyond cost and convenience. This is not to say that there are learners who cannot be assessed. On the contrary, if individuals are being instructed and are learning, there must be some performance, some behavioral manifestation of learning, that can be measured. Hence in principle there is no student who cannot be assessed. If, however, one would include everyone, one must be willing to pay the monetary costs of more comprehensive assessment strategies, such as special provisions for test-taking, or indirect assessment (for example, through teacher reports) or portfolio assessment, and to invest in the development and comparison of various measures so that they can be equated. *How reliable are exclusion rules?* The experience of NAEP and NELS:88 (see

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[2]Of course language-minority citizens (and documented and undocumented residents) are typically (about 75 percent of the time) proficient in English as well as at least one other language. With the growth in the minority language population, however, the number of non-English proficient and limited English proficient children has substantially grown.

[3]An IEP is an Individualized Education Program in special education for the mentally or physically handicapped.

Spencer 1991, Ingels 1991) suggests serious limitations to their reliability. To the extent that the reliability and validity of exclusion criteria are questionable, the case for maximizing inclusiveness becomes stronger.

2. *EXCLUSION ISSUES IN LONGITUDINAL PERSPECTIVE.*

Background: NELS:88. This paper draws on the experience of the National Education Longitudinal Study of 1988 (NELS:88). The lessons it points to are relevant to other longitudinal studies of high school youth, but no less to studies of children in the early grades of their schooling, such as are currently planned by the National Center for Education Statistics (NCES). We therefore also discuss the implications of sample exclusion in the context of the forthcoming NCES Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K).

NELS:88 is the third major longitudinal study sponsored by the National Center for Education Statistics (NCES) of the U.S. Department of Education. The two studies that preceded NELS:88 (the National Longitudinal Study of the High School Class of 1972 [NLS-72] and High School and Beyond [HS&B]) surveyed high school seniors (and sophomores in HS&B) through high school, postsecondary education, and work and family formation experiences.

NELS:88 seeks to expand on the base of knowledge built in the prior studies by following children starting at an earlier age (eighth grade) and by updating information throughout the 1990s. NCES plans to begin a new longitudinal study series that would begin far earlier still. The planning phase of the Early Childhood Longitudinal Study, Kindergarten Cohort (ECLS-K) will begin in the fall of 1993. ECLS-K will assess and survey children from kindergarten through grade 5; a longitudinal birth cohort study (ECLS-B) is tentatively planned as well (see NCES [1992] for a statement of the synthetic cohort ECLS-B/ECLS-K design).

NELS:88's major features include the planned integration of student, dropout, parent, teacher, and school studies; the initial concentration on an eighth grade student cohort with follow-up at two year intervals; the inclusion of supplementary components to support analyses of geographically or demographically distinct subgroups; and design linkages to NLS-72, HS&B, and the National Assessment of Educational Progress (NAEP).[4]

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[4]Of course design linkages are most readily achieved if samples are defined across studies using uniform exclusion criteria, or criteria that can at least be readily mapped into each other for interpretation. Potential NAEP-NELS:88 linkages illustrate this notion. From the start, an objective of NELS:88 has been to be able to implement NAEP mathematics scales. Since NAEP is designed to provide accurate assessment at the aggregate level rather than at the individual level as in NELS:88, it spirals a relatively large pool of items from each content area. This broad content coverage enables NAEP to develop a vertical composite scale that spans the 4th, 8th, and 12th grade levels. In addition, the large item pool in NAEP allows one to behaviorally anchor or "mark" selected score points along the vertical scale with groups of items that describe performance at each of these score points. While the NELS:88 mathematics scales are also behaviorally anchored, they would have an added dimension of interpretability if they could also be put on the NAEP behaviorally anchored scale. The equating of two measures or test forms can be carried out with reasonable expectations of success if either of two conditions hold--the different forms are administered to two different but equivalent samples (the samples must be essentially similar overall and for gender and principal racial/ethnic subgroups) or the samples may differ but there are many items common to both forms. For NAEP-NELS:88 equating, the preferred approach would be to employ the equivalent group design and use a small set of common items as an additional check on the acceptability of the equating results. The equivalence of the two samples, however, will be imperfect if different eligibility rules have been

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Multiple research and policy objectives are addressed through the NELS:88 design. The study is intended to produce a general purpose data set for the development and examination of educational policy at all governmental levels. Specifically, NELS:88 focuses on a number of interrelated policy issues including: identification of school attributes associated with achievement; the transition of different types of students from eighth grade to secondary school; the transition of secondary students to postsecondary education or the work force; the influence of ability grouping and program type on future educational experiences and achievements; determinants of dropping out of the educational system; and changes in educational practices over time.

Longitudinal versus cross-sectional assessment. The aims of a longitudinal research program such as NELS:88 are somewhat different from those of a cross-sectional assessment. NAEP offers a good example of an assessment that is designed to serve basic indicators purposes, including trend comparisons over time. A brief comparison on NELS:88 and NAEP testing goals may be useful.

First, let us limit the comparison to the NELS:88 cognitive tests and the NAEP tests, then extend the comparison to take account of the other kinds of educational outcome data collected by NELS:88.

For NAEP, only cross-sectional or time-series (repeated cross-sectional) population estimates are required. NELS:88 measures individual-level growth between eighth grade and grade twelve. while NAEP employs aggregate scores to assess the status of groups (including racial/ethnic groups, regions, and gender groups). Through spiralling of the test forms, NAEP takes a much broader reading of the curriculum. The NELS:88 test batteries have followed a developmental-cognitive model that has both curriculum-based and cognitive processing components.[5] They require more testing time (around 85 minutes) and use a narrower item pool within the four subjects--mathematics, science, reading and social studies--that comprise the test battery.

However, NELS:88 collects additional individual-level outcome data. It collects high school grades and attendance records, and ratings of the student by teachers. The study ascertains who persists in school, who is retained, and who drops out. Moreover, since individuals are followed for a considerable period, additional outcomes such as postsecondary education and labor force participation are also investigated. Notwithstanding the undoubted critical status of the measurement of achievement, it is also important to measure other educational outcomes, such as persistence in secondary and postsecondary education. It is important, moreover, to relate educational antecedents to such outcomes as the economic assimilation and eventual quality of life for all sample members, but perhaps particularly of interest to investigate these outcomes for handicapped and individuals who

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employed. In general, there is much to be gained by achieving a national consensus on eligibility criteria that would facilitate cross-study comparisons (Ingels, 1991; McGrew, Algozzine, Ysseldyke, Thurlow & Spiegel, 1993).

[5]The NELS:88 tests are designed to provide both criterion-referenced or mastery information, as well as norm-referenced information. When measuring change within a developmental model that fits a vertical scale, the NELS:88 "proficiency levels" mark developmental or curriculum-based milestones. As in NAEP, the anchoring of these criterion referenced points may be in terms of task descriptions empirically locatable along the scale, locatable by expert judgment, or by a mixture of both. Of course, for any national test, relevance to the curriculum is a challenge to achieve, given variations in curriculum coverage by locale and textbook.

are (or were) less than fully proficient in English. A longitudinal study is an ideal vehicle for supplying such data.

In sum, the NAEP and NELS testing programs are complementary. NAEP provides indicators data that gives a detailed accounting of the nation's progress toward its educational goals. NELS:88 provides data about the "how" and "why" of the underlying educational processes.

3. NELS:88 1988 BASE YEAR EXCLUDED STUDENTS IN 1990 AND 1992

Again, some 5.37 percent of the potential base year eighth grade sample was excluded in NELS:88--Figure 1 shows the breakdown of the excluded group, in terms of the reason for exclusion (that is, mental disability, physical disability, or language barrier). In the first follow-up, a special study of base year ineligible students was initiated.

NORC selected from the greater pool (over 10,000) the number of excluded students who would have been included in the study had no students been excluded. That first cut yields 1598 base year excluded students. Had there been no exclusion, the NELS:88 base year sample (N = 26,432) would have contained an additional 59 students with physical disabilities, an additional 835 students with mental disabilities, and an additional 532 students with language barriers to participation.[6] In addition, 172 students were excluded with no reason given for their exclusion. This sample of 1598 base year excluded students was subsampled for budget reasons; a subsample of 674 base year ineligibles were pursued in the first follow-up (1990) and second follow-up (1992). Of the 674 excluded base year students, 225 were language exclusions, 24 were physical disability exclusions, 352 were mental barrier exclusions, and 73 were excluded with no reason given.

First Follow-Up Results: overall results. Of the 674 base year excluded students studied in the first follow-up, NORC was able to ascertain the status of all but 42. Hence information on school enrollment status and NELS:88 eligibility status was obtained for 94 percent of the excluded student sample. Some 48 exclusions were found to be sampling errors (for example, the student's name appeared on an eighth grade roster, but the student was not an eighth grader, owing to retention in the prior grade or some other factor; or the student's name appeared on the school's roster but the student had transferred out or had never enrolled). Removing these 48 cases provides a new sample size of 674 - 48, or 626.

Of the 626 cases, 29 were declared out of scope, because of either the death of the sample member, or the sample member being outside the country in the spring term of 1990 (such cases are viewed as only temporarily out of scope--such individuals would be pursued in 1992 in cases where they had returned to the United States). If these cases are subtracted from the denominator, a sample size of 597 is obtained. Of those 597 students, 314 were found to be eligible, 241 were found to be still ineligible, and the status of 42 was not ascertained. In other words, of the 597 in scope base

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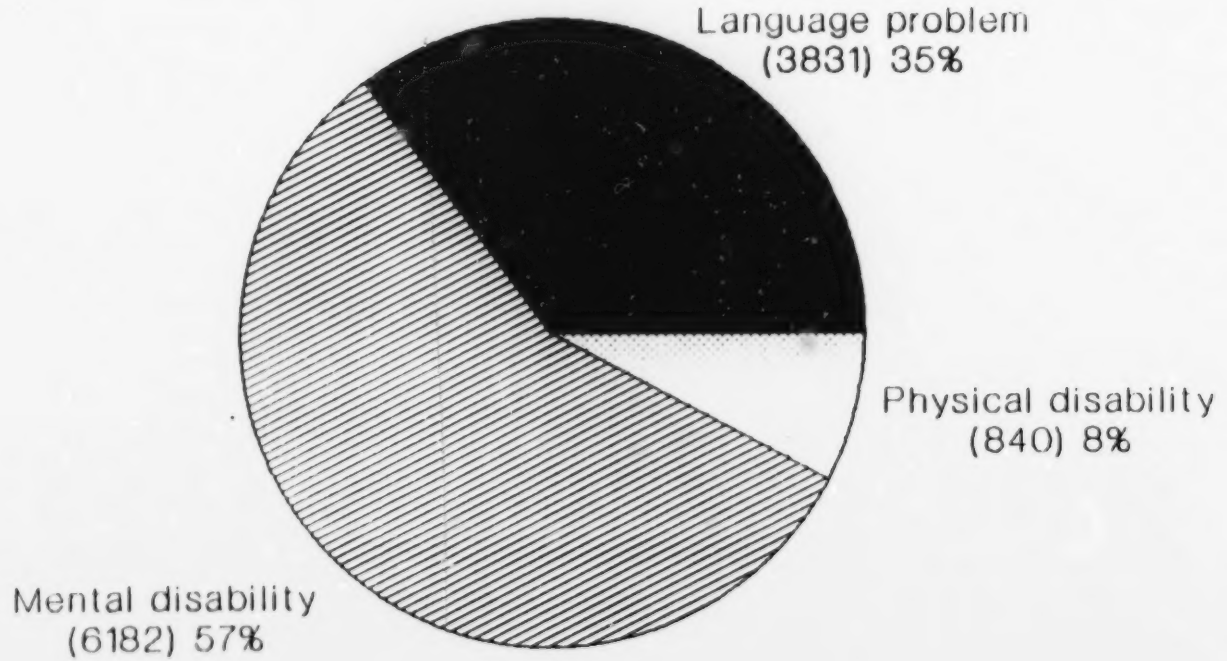
[6]While all excluded students were assigned to one of the three exclusion categories (or to the "no reason" category), in a handful of cases students had multiple bases for exclusion (for example, one might have both a physical and a language barrier to participation).

Figure 1

Excluded Students
NELS:88 Base Year Schools



N=10,853

year excluded students in 1990, the enrollment and eligibility status of 7 percent could not be ascertained (mostly, these cases were unlocatable), 53 percent were found to be eligible for NELS:88, and 40 percent were still ineligible.[7]

First Follow-Up results: language exclusions. These results can be viewed for each of the categories of exclusion, thus language, physical, and mental barriers to participation. For language exclusions, almost 72 percent (131) of in-scope respondents were reclassified as eligible, nearly 22 percent (40) retained their ineligible classification, and around 7 percent were unlocatable and their status could not be ascertained.

First Follow-Up results: physical handicap exclusions. Of 23 physical barrier exclusions, 39 percent (9) were reclassified as eligible in 1990, 52 percent (12) remained ineligible, and about 9 percent (2) could not be located.

First Follow-Up results: mental handicap exclusions. Of 333 in-scope base year ineligibles excluded in 1988 by virtue of mental barriers to participation, 42 percent (140) were classified as eligible in 1990, almost 53 percent (175) as ineligible, while for 5 percent (18), status could not be ascertained.

Results at the Conclusion of the Second Follow-Up. Second follow-up results show (see the two tables below) comparatively little change from the first follow-up, though the numbers of ineligible students have diminished further, with the proportion eligible increasing from 53 percent to 57 percent.

Interpretation of 1990 and 1992 Results. Because of their disproportionately high overall dropout rate, inclusion of excluded students in dropout statistics does matter to overall estimates. Moreover, reassessment of eligibility status led to inclusion in NELS:88 follow-up rounds of a majority (57 percent) of the students found ineligible in the base year. Of those excluded, those excluded for language reasons had the greatest chance of re-entering NELS:88 by 1992, with 72 percent eligible, 12 percent ineligible, and 17 percent unlocatable four years after their exclusion in eighth grade.

In contrast, about 57 percent of the small physically ineligible sample, and about half of the mentally impaired sample, had been reclassified as eligible by 1992. It is unsurprising that such a high proportion of the "unknown" category (no reason for exclusion given) turned out to represent sampling errors (about 22 percent of this group appeared on rosters in error).

These changes in status represent several tendencies that cannot readily be disentangled. First some students' status will have changed. This result is most likely for English non-proficient and limited proficient students, who over time may master English to a significantly greater degree. Second, judgments of ineligibility, though guided by objective criteria, also have a subjective

[7]All percents are raw (sample) percents; weighted percents, which supply national population estimates, could differ.

Table 1: Summary of Final 1992 Statuses for 1988 Excluded Students in Unweighted Percents

Reason for 1988 exclusion:	ELIGIBLE	INELIGIBLE	NOT ASCERTAINED	SAMPLE N
language barrier	70.6%	12.4%	16.9%	177
physical barrier	56.5%	39.1%	4.3%	23
mental impairment	50.2%	42.3%	7.6%	331
unknown reason	54.5%	27.3%	18.2%	55
TOTAL	57.0%	31.7%	11.3%	586

(excludes cases sampled in error and those out of scope [dead or out of country] for 1992 round)
(owing to rounding, rows may not sum to 100 percent)

Table 2: 1992 Status Ns of 1988 Excluded Students

1988 reason for exclusion:	ELIG.	INELIG.	OUT OF SCOPE	N.A.[1]	SAMPLING ERROR
language	125	22	25	30	23
physical	13	9	0	1	1
mental	166	140	5	25	16
unknown	30	15	2	10	16
TOTAL	334	186	32	66	56

[1] N.A. = status not ascertained.

dimension, and are somewhat unreliable. Some amount of change will be associated simply with re-asking the eligibility status question. Third, the question of eligibility was not posed in precisely the same way in 1990 and 1992 as in the 1988 base year. Though the general criteria were largely unchanged[9], further information was provided for the interpretation of the general criteria.[10] In addition, information was sought from school staff who had a greater likelihood of personally knowing the student. The task, for school personnel, of supplying information about a small number of base year ineligibles was far less daunting and presumably less error-prone than the task of providing classification information for up to several hundred potential sample members per school in the base year. Still, in the main, these considerations point to the likelihood that the 1990 and 1992 classifications are more accurate than the 1988 classifications, in instances where the individual has not significantly changed, and the likelihood that where change has occurred in a student's eligibility status, that change has been captured. These considerations also support the contention that a large number of students who could successfully have participated were excluded by their schools.

4. RECOMMENDATIONS.

Education longitudinal studies should be designed so that they will map the school careers of learning disabled, physically handicapped, and limited English proficiency students in a way that allows a clear evaluation of such children's integration and progress. Normative conceptions of such progress and critiques of past and current special education practice are needed to ensure that the critical indicators of integration are incorporated into new surveys. To study social development, state-of-the-art conceptions and measures of social adaptation as well as indicators of conduct disorder and other adjustment disorders must be incorporated and analytic methods devised to model trajectories of social development and the impact of school and classroom practices on these trajectories.

Current studies fall short of this goal in a number of ways. However, the upcoming study of the kindergarten cohort of the Early Childhood Longitudinal Survey (ECLS-K) offers the opportunity to improve past survey and assessment practice. Some of the limitations of that practice may be quickly summarized.

Cross-sectional indicators studies such as NAEP are not suitable vehicles for mapping the school careers of learning disabled, handicapped, and limited English proficiency students, though implicitly longitudinal components of NAEP such as the 1987 and 1990 high school transcripts studies contribute importantly to this end. (The NAEP transcripts studies captured detailed information about

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[9]A change that affected a very few Hispanic ineligibles was the provision of a Spanish-language NELS:88 questionnaire in 1990, and again in 1992; a Spanish language student questionnaire was not offered in the base year.

[10]For further documentation of 1990 screening procedures, see Ingels 1991; on 1992 procedures, see the appendix to this paper.

special education students.)[11] Greater inclusion of students will serve the reporting purposes of studies such as NAEP, and greater use of the data NAEP collects on excluded students, will serve the needs of better estimating the proficiency and progress of the nation's school children. Data that will help to interpret cross-sectional results for special populations may be contributed by longitudinal studies in the mold of HS&B, NELS:88, and ECLS-K. Such studies permit us to trace the school careers of students, to continue to follow them if they drop out of school, and to measure occupational and postsecondary outcomes for them as well. Moreover, longitudinal studies permit us to ascertain to what degree disabilities and lack of English language proficiencies may be transient states, to compare individuals who become proficient in English with those who do not, and to compare the differing educational and life outcomes of individuals who share a handicap status. Again, longitudinal tests can and should be both curriculum- and developmentally-sensitive, and provide a basis for tracing individual growth trajectories over the course of schooling.

Future longitudinal studies should follow the model established by NELS:88. If students are to be excluded in the baseline, they should be followed over time just as eligible sample members are, and their eligibility study periodically reassessed.

However, a further option is to exclude no one. To be sure, if learning is taking place it can be measured, even if it cannot be measured through traditional multiple choice tests. One can be very inclusive indeed, though being so may prove quite costly. An important opportunity to extend the inclusiveness of testing programs is provided by the further development and refinement of varieties of performance assessment.[12] Performance assessment provides greater opportunities than traditional multiple choice testing for inclusion of the full range of students. Non-verbal measures may oftentimes be efficacious while avoiding the problems of unequal participation associated with verbal measures (for example, quantitative knowledge may be tested through a nonverbal matching and a nonverbal calculation task: Huttenlocher, Jordan, & Levine; Levine, Jordan, & Huttenlocher, 1992)[13]; portfolio assessments provide a basis for inclusion of many traditionally excluded students.

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[11]Ironically, the HS&B and NELS:88 transcripts studies do not contribute as much to this aim. Transcripts data were not collected for ineligible HS&B students, nor does the dataset provide information about excluded students so that analysts can learn who was excluded and why, or their characteristics. NELS:88 does better in several respects, but not all: transcripts were collected in 1992 for all eligible sample members (dropouts, seniors, non-seniors) and all base year-ineligible 1992 seniors. However, it is difficult to identify handicapped and LEP individuals in the dataset, difficult to characterize their handicaps or language proficiency at a detailed level, nor was much special coding done of special education classes in the transcripts study. Moreover, transcripts were not collected for base year excluded students who were not 1992 seniors, and transcript records will be incomplete for LEP and handicapped 1988 eighth graders who fell behind the modal progression through school for their class. Hayward and Thorne (1990) report that only 68 percent of disabled (and 87 percent of nondisabled) students graduate on time; LEP students also are disproportionately likely to repeat a grade (or drop out). A strong argument could be made for a NELS:88 1994 secondary transcripts follow-up.

[12]Performance (or "alternative") assessment requires the student to execute a task rather than to choose an answer from a list of alternatives. Students could be asked to design a physics experiment or generate hypotheses, show the reasoning behind the solution to a mathematics problem, write an essay, or converse in a foreign language. Open-ended questions and extended tasks are types of performance assessment. Portfolio assessments may also be used to collect performance-based work. Portfolios present a sample of the student's performance over time.

[13]Nonverbal measures may be important for many reasons: the work of Huttenlocher and Levine underlines the extent to which current verbal assessment instruments do not adequately assess intellectual competence, particularly in young children. In particular, the ability to test knowledge and skill verbally and *nonverbally* is important in the assessment of children whose knowledge may exceed their language skills, such as children with verbal learning disabilities (and children

Since resources for national testing programs are always scarce, one must keep in mind the cost in dollars (as well as student and school burden) of alternative approaches to measuring a given construct. For more costly performance-based measures, cost/validity ratios may sometimes be too high to consider them except for subsamples of a national sample and for special groups that would otherwise be excluded. Alternative assessment of students who would otherwise be excluded should be given serious consideration, especially if bridges can be built from these measures to the main test.

Other strategies that can be employed to increase the inclusiveness of direct testing programs are described in Ingels (1991), Spencer (1991), McGrew, Thurlow, Shriner and Spiegel (1992), Ingels and Scott (1993), and McGrew, Thurlow, and Spiegel (1993). Special accommodations to facilitate participation in direct assessments include the following: extended time limits or breaking the test into multiple sessions; small group or one-on-one administration; translation (including the use of sign language); paraphrase, reading to the student (directions, or questions and content), using visual aids; allowing the use of dictionaries; taking dictation from the student; providing special acoustics, furniture, visual magnification or auditory amplification devices; and providing large print or Braille versions of instruments. Although these accommodations are costly, costs could be minimized by using lower sampling rates for students who are expensive to assess.

While there are many means by which assessment instruments could be made accessible to the handicapped--administering verbal items by sign language for the hearing impaired, developing non-visual cognitive measures for items that require the use of visual stimuli for the blind, and so on--there may remain some instances in which it will not be possible to develop an accommodation or equivalent item to work around the handicap. In such cases, the absence of data points will have to be handled analytically by adjusting scores or analyzing the data separately for children with different types of disabilities.

Alternative forms of direct assessment may also be utilized. An essay question is an inherently fairer test of the language skills of a dyslexic than is a multiple choice test. New methods that allow for vertically[14] scaling mixtures of "right answer only" (for example, from a multiple choice test) and "partial credit" (for example, from a performance assessment) scoring (Muraki, 1992) offer greater testing flexibility in working around specific handicaps.

However, direct assessment is not the only possible strategy. Multilevel studies such as NELS:88 or the upcoming ECLS-K offer prospects of indirect assessment through the reports that may be collected from teachers, parents, and observers of the child. HS&B collected evaluations of individual students through its teacher comment file; NELS:88 employs teacher ratings of individual students in the teacher questionnaires. A number of existing inventories could be adapted to extend

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from impoverished backgrounds as well--Huttenlocher and Levine have shown that children from impoverished backgrounds perform as well as middle-class children on nonverbal calculation problems but not on verbal calculation problems such as story problems and number fact problems. Their assessment tasks separately tap different aspects of cognitive ability (conceptual knowledge, mathematical skill, and verbal communicative skills) using the same format over a variety of ages, a design feature important for accurate longitudinal assessment.

[14]It is assumed that variables of interest within a longitudinal design will follow a developmental model and be capable of vertical scaling (within an IRT model) in such a way as to provide a metric that can be used to define quantitative indices of growth.

this strategy to younger children. For example, an age-graded criterion-referenced teacher checklist (as a component of the Work Sampling System) has been developed by Meisels (1992) for use from age 3 to grade 3 in measuring personal/social development, social and cultural awareness, and physical development.

Finally, ancillary data should be collected regardless of whether the individual can be directly assessed. These data should encompass surveys of parents, special education or bilingual education teachers, regular teachers, school and program administrators, and school records.

However, for IEP and LEP students, data should be collected over and beyond that obtained in regular parent, teacher and school questionnaires. There is a good deal of data about LEP and IEP students that should be collected, but has not been gathered in studies such as HS&B and NELS:88. For handicapped students, much more information should be gathered about the individual's physical, cognitive, and psychosocial functioning. At minimum, the data elements in the NAEP Excluded Student Questionnaire (type of disability, severity, functional grade level in math and English, percentage of the school day student is served by a special education program, and so on) would be of extraordinary value to obtain for all IEP and LEP students, regardless of their eligibility status. In addition, it would be desirable to obtain school reports of the sample member's behavior in educational and social settings (that is, the degree to which there are behavior problems, and whether they lead to limitations in daily activities). For LEP students, information about how long the student has been served by a special language program and the teacher's rating of the student's proficiency along the separate dimensions of speaking, understanding, reading and writing English should be obtained. Academic transcripts studies that are part of education longitudinal surveys should schedule a further data collection two years after the modal senior year of the cohort to complete records collection for individuals who did not graduate with their class. In addition, transcripts studies should invest in the coding of special education courses and in clearly describing the IEP of each special education student.

5. STARTING ANEW AT KINDERGARTEN: THE NCES EARLY CHILDHOOD LONGITUDINAL STUDY

It might be a useful exercise to see how the analysis and recommendations above might apply to an important new initiative, the kindergarten cohort of the NCES Early Childhood Longitudinal Study (ECLS-K). With a chance to start afresh--but also an opportunity that involves very young children, not eighth graders or high school students, hence a new context with its own peculiarities--what direction might be taken?

The ECLS-K will be launched at a time when U.S. schools and the families, teachers, and administrators who participate in them face unprecedented tasks. Powerful historical forces including immigration, differential fertility rates of subcultural groups, a dramatic increase in the number of women in the work force, and significant changes in family structure have produced an astonishingly diverse population of children entering school. These children differ from each other and from past school-entering cohorts not only in language, cultural background, and family composition, but also because of the multiplicity of pre-school care arrangements that have shaped their development prior to school entry. Coinciding with the increase in diversity of the children schools are expected to educate is the emergence of a national debate about how schools should respond.

At the same time, educational opinion leaders have mobilized substantial support for new and more ambitious goals for school. These include, but are not limited to, a view of learning that goes well beyond basic skills to include conceptual understanding and associated competence in inquiry, problem-solving, speaking, and writing, the mainstreaming of children with a wide array of learning disabilities or handicaps; the provision of pre-primary and after school care; more effective coping with the susceptibility of children to conduct disorders and involvement in an array of related anti-social, aggressive, and violent behaviors; and the utilization of schools as the central agents in achieving an agenda of ambitious public health initiatives. These reforms have significant implications for school management, teacher training, instruction, and the assessment of student, teacher, and school performance. While the reform movement has shifted emphasis from educational inputs to national standards, measurable outcomes, and accountability, full consensus has not been reached on the proper goals of education for disabled youth (Bruininks, Thurlow & Ysseldyke, 1992); the ECLS-K must pay particular heed, in selecting outcome measures, to this ongoing debate. In many respects the educational objectives appropriate to non-English speakers are also at this time unclear and contested.

Clearly, the combination of increasingly diverse inputs and ever-more ambitious goals poses schools with difficult if not daunting challenges. It will be the task of the kindergarten assessment to describe accurately the heterogeneity of kindergarten children along the basic dimensions of demography, culture, language, and school readiness that are critical to the establishment of policies that are designed to cope sensitively and creatively with this diversity. At the same time, the kindergarten results will serve both as outcome data--to assess the effects of a multiplicity of child-care arrangements--and as baseline data--to assess how the schooling process shapes later individual development with respect to the critical goals of schooling. Data collected in first grade and subsequent years must provide a basis for measuring change in critical dimensions and for relating trajectories of growth and change to variation in those school processes viewed as essential to the ongoing debate over school reform.

Four specific issues are to be addressed by the ECLS-K: (1) school readiness; (2) transitions to kindergarten, first grade, and beyond; (3) kindergarten and elementary school student performance; (4) cognitive growth and student progress. The several purposes of the kindergarten data collection and the need to create a broadly useful record of development for each child during subsequent years pose a web of inter-related conceptual and methodological questions. The issue of maximum inclusion of students within such a study must be addressed within the context of the issues the study is to address and the design and methodologies available to illuminate those issues. We will pose two questions that will point to the special challenge of including all students in the study. First, what general testing strategy must be followed if the study's aims are to be met, and how will this general strategy provide greater inclusiveness? Second, how can the most prevalent category of educational handicap--learning disability--be distinguished from differential rate of maturation in children who are so young? The answer to the second question highlights a distinctive feature of a longitudinal approach.

The general testing strategy. ECLS tests must measure specific domains independently and consistently over the full age range of both ECLS cohorts. The preferred analytic strategy would be

to use individual growth curves[15], rather than mean group differences, and should focus attention on growth rates over the time span. ECLS-K should aim at the measurement of growth and development, holistically conceived--including intelligence, language, motor, and socioemotional development--through a variety of information sources. The unifying focus of all these measures must be the child.

This basic approach permits three levels of data-gathering: direct assessment (including some alternative assessment), indirect assessment (including teacher-completed developmental checklists and ratings of students, and portfolio assessment), and ancillary data from contextual sources (school records, parents, teachers, and so on). Direct assessments of kindergarten children should take place to the extent possible. Individual administrations will be most suitable for kindergarten students (though one might move to group administration in first and second grade); individual administration maximizes the number of students who can be included. For children with learning disabilities that do not involve physical deficits, there may be considerable uncertainly about whether a particular child has a learning disability or not. Because of this uncertainly, one should use the same instruments as with other children to the extent possible, but be ready to treat the results separately analytically.

However, to the extent that a student may be incapable of taking the planned assessment even so, other options should be pursued for obtaining information about that individual's cognitive and socioemotional development. Recent developments (Muraki, 1992) permit both right-only answers and continuous scores (as found in free response, portfolio assessment, teacher ratings of child performance, and so on) to be put on the same vertical scale. Students who cannot be directly assessed by traditional means should nevertheless be included, through a range of direct and indirect testing options, in the study. In addition, the existence of the disability should be noted and the case flagged in the file so that it could be analyzed separately. Further information about the disability would be obtained.

Care should be taken that the eligibility criteria employed in ECLS-K and NAEP are at least compatible--that is, if they are not identical, they should be such that they can be mapped to each other so that an identifiable population can truly be compared. This is important because, just as NELS:88 and NAEP equating is desirable at twelfth (and eighth) grade, so too will it be desirable to build an ELCS-K/NAEP crosswalk at fourth grade.

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[15]Ragosa and Willett (1985) argue that studies of quantitative growth or change should begin with a model for individual change over time. For each subject it is possible to imagine a scatter plot that relates subject age to the subject's status on the attribute of interest (e.g., reading ability). The functional relationship between that subject's age and true status is a "growth curve" or "change function" that is characterized by a set of subject-specific growth parameters. The distribution of these parameters over the population of persons then defines the object of a longitudinal study. Bryk and Raudenbush (1987) showed how to use this conception to examine the mean growth curve, to assess the degree of individual variability around mean growth, to assess the psychometric properties of an instrument measuring either status or change, to assess relationships between true initial status and true change, and to assess correlates of growth. Ware (1985) has described the flexibility of this approach in coping with unbalanced designs, missing data, sample attrition, and time-varying covariates. The plausibility of linking such data from ECLS-B and ECLS-K in a synthetic cohort or accelerated longitudinal design is underlined in a parallel discussion by Raudenbush and Chan (1992).

Learning disability versus different rates of maturation. In assessing young children it is particularly important to distinguish between characteristics related to maturational variables and learning disabilities. Schools have difficulty distinguishing between these characteristics; a longitudinal study, properly defined, has much less difficulty in this regard. Such a study can plot the educational trajectories of learning disabled students who are improperly classified, as well as of students who are misclassified as learning disabled.

Most handicapped students in the school-age population suffer from learning disabilities or speech impairment; others suffer from mental retardation or emotional disturbance. Much rarer are orthopedic impairments and hearing and visual handicaps. While physical disabilities can be reliably determined, judgments about matters such as learning disability do not tend to be highly reliable (Bennett and Ragosta, 1984, 1988). For younger children such as kindergarten students especially it will be unclear who the learning disabled are, either because they have not yet been so classified by their schools, or because such classifications are especially prone to error early on.

Nonetheless, when children enter school (or even at pre-school entry) diagnosis of a learning disability may already have been made on the basis of I.Q.-type tests. Such diagnosis usually involves some sign such as a large discrepancy between performance and verbal measures or a severe verbal deficit. There may be legal or administrative definitions of different levels of learning disabilities. Many people fear that such early diagnosis may be erroneous, or even if correct, will stigmatize the child and prevent full development of abilities, even if they turn out to be of a limited level. Thus, the emphasis on mainstreaming. Indeed, if disabled and nondisabled children are taught together in the classroom, the goal of integrating assessment into instruction implies that principles of full inclusion apply to testing as well. At the same time, one must nevertheless implement special procedures to ensure that children with disabilities are not subjected to testing or assessment procedures that are inappropriate or clearly impossible for them to perform.

Diagnoses of learning disability are subject to both Type I and Type II errors. Children who later turn out to have learning disabilities are often undetected at early testing, and some who are diagnosed as having learning disabilities, later turn out to have been slow maturers. In the early years one must be prepared to treat the classification of learning disability tentatively. Since the study is longitudinal and ECLS-K sample members will be followed over a five-year span, there will be an unusually good opportunity to study maturational rates and to separate out learning disabilities from slow maturation. Thus one should expect some changes over time in the designation of particular children as having a learning disability or not.

The distinction will also show up in analysis. The preferred analytic strategy for a study such as ECLS-K--using individual growth curves rather than mean group differences--will focus attention on growth rates over the time span of the study and will permit analysts to separate out rate of growth from the level of performance. By the fifth grade the curve for learning disabled children should assume a distinctive shape and have stabilized.

Because learning disabilities are often a function of neurological deficits or abnormalities, it may be possible to use a simple, short neurological test that could be easily administered to those children who score in the lowest part of the distribution. Such tests among pre-school and kindergarten children have been shown to have a very strong correlation with subsequent school performance (Huttenlocher, Levine, Huttenlocher, & Gates, 1990).

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7. *APPENDIX: NELS:88 SECOND FOLLOW-UP (1992) SCREENER FOR THE FOLLOWBACK STUDY OF EXCLUDED STUDENTS*

NELS:88 2FU: FOLLOWBACK STUDY OF EXCLUDED STUDENTS
STUDENT ENROLLMENT STATUS SCREENER
SCHOOL CONTACT

NORC 4521
3/92

DATE: / /92

FI NAME: _____ FI ID: |__|__|__|__|__|__|

STUDENT ID: |__|__|__|__|__|__|__|__|

STUDENT NAME: _____

SCHOOL NAME: _____

CONTACT NAME: _____

ASK TO SPEAK TO A GUIDANCE COUNSELOR

Hello, this is _____ calling from the National Opinion Research Center at the University of Chicago. I'm calling regarding the Second Follow-Up to the National Education Longitudinal Study of 1988. We are currently following up on students who were excluded from the student sample in 1988 or 1990 because of a language barrier or physical or mental disability. We are attempting to locate the students to determine whether they are eligible for the survey. We think that one/some of these students may be enrolled in your school, and I would like to ask you a few questions about him/her/them.

1. Is (STUDENT) currently enrolled in your school?

Yes	1	**SKIP TO QUESTION 4**
No, he/she dropped out (has had 20 or more consecutive unexcused absences)	2	**SKIP TO QUESTION 3A**
No, he/she transferred to another school	3	**GO TO QUESTION 2**
No -- OTHER (home-study, early graduate, institutionalized, etc.) SPECIFY BELOW	4	**SKIP TO QUESTION 3A**

_____

2. What is the name and location of the school to which the student transferred?

NAME OF SCHOOL: _____ CITY _____ STATE _____

GO TO QUESTION 3A

3A. In what grade was (STUDENT) when he/she left your school?

GRADE: |__|__|

Not assigned a grade-level 1

3B. When did he/she last attend your school?

|__|__| - 19 |__|__| --> **IF PRIOR TO MARCH 1, 1991, STOP. SKIP TO BOX AT BOTTOM OF NEXT PAGE. (IF DROPOUT, THIS DATE IS MOST RECENT DROPOUT DATE.)**
MONTH YEAR **IF AFTER MARCH 1, CONTINUE WITH QUESTION 4.**

4. **Did (STUDENT) have 20 or more consecutive unexcused absences between March 1, 1991 and December 15, 1991?**

Yes . . . . . 1 **GO TO QUESTION 5A**

No . . . . . 2 **SKIP TO BOX AT BOTTOM OF PAGE**

Not enrolled during that time period . . . . . 3 **SKIP TO BOX AT BOTTOM OF PAGE**

5A. During which month and year did he/she first stop attending school?

|__|__| - 19 |__|__| **(DROPOUT DATE)**
MONTH YEAR

5B. In what grade was (STUDENT) at that time?

GRADE: |__|__|

Not assigned a grade-level 1

6. **Did he/she return to school, and if so, during which month and year?**

Yes . . . . . 1 **DROP-IN DATE:** |__|__| - 19 |__|__| **–> GO TO QUESTION 7A**
MONTH YEAR

No . . . . . 2 **SKIP TO BOX AT BOTTOM OF PAGE**

7A. Did he/she stop attending school again at some later point, and if so when?

Yes . . . . . 1 **DROPOUT DATE:** |__|__| - 19 |__|__| **–> GO TO QUESTION 7B**
MONTH YEAR

No . . . . . 2 **SKIP TO BOX BELOW**

7B. In what grade was (STUDENT) at that time?

GRADE: |__|__|

Not assigned a grade-level 1

COLLECTING REMAINING DROPOUT/IN DATES, IF NECESSARY. THEN GO TO BOX BELOW

SCREEN FOR ENROLLMENT FOR EACH EXCLUDED STUDENT REPORTED TO ATTEND THE SCHOOL. THEN ADMINISTER THE ELIGIBILITY SCREENER FOR EACH STUDENT WHO IS REPORTED TO BE A DROPOUT, AN ENROLLED STUDENT, OR AN "OTHER" IN QUESTION 1.

DO NOT ADMINISTER THE ELIGIBILITY SCREENER FOR STUDENTS WHO HAVE TRANSFERRED TO ANOTHER SCHOOL. YOU WILL INSTEAD CONTACT THE NEW SCHOOL AND ADMINISTER THE ENROLLMENT AND ELIGIBILITY SCREENERS FOR THAT STUDENT.

NELS:88 2FU: FOLLOWBACK STUDY OF EXCLUDED STUDENTS
ELIGIBILITY SCREENER

NORC 452
3/9

DATE: / /92

FI NAME: _____ FI ID: |__|__|__|__|__|__|

STUDENT ID: |__|__|__|__|__|__|__|

STUDENT NAME: _____

SCHOOL NAME: _____

CONTACT NAME: _____

Now I would like to ask a few questions that will help us determine whether (STUDENT) is eligible for the Second Follow-U of NELS:88. **NOTE: IF THE STUDENT IS NOT CURRENTLY ENROLLED IN THE SCHOOL, YOU WILL NEED TO MAK THE APPROPRIATE CHANGES IN VERB TENSE IN THE SCREENER QUESTIONS, AND MAY NEED TO SUBSTITUTE "MOST RECENT" FOR "1991-92' IN QUESTIONS 1 AND 5.**

1. **Was (STUDENT'S) 1991-92 (most recent) reading score in ENGLISH below the eighth grade level?**

Yes	1	**GO TO QUESTION 2**
No	2	**GO TO QUESTION 2**
Unable to assign a grade level to score	3	**GO TO QUESTION 2**
No reading score available from 91-92	4	**SKIP TO QUESTION 3**

ALSO RECORD ANSWER, VERBATIM _____

_____

2. **What was that reading score? (WRITE IN BELOW)**

_____

IF BELOW EIGHTH GRADE, SKIP TO Q4. IF EQUAL TO OR HIGHER THAN EIGHTH GRADE, SKIP TO Q9.
IF UNABLE TO ASSIGN A GRADE LEVEL, GO TO Q3.

3. **Do you feel that (STUDENT) is capable of completing a questionnaire designed for students who read English a the eighth grade level?**

Yes	1
No	2

ALSO RECORD ANSWER, VERBATIM _____

_____

_____

4. **Is (STUDENT) a native speaker of Spanish?**

Yes	1	**GO TO QUESTION 5**
No	2	**SKIP TO QUESTION 8**

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5. **Was his/her 1991-92 (most recent) reading score in Spanish below the eighth grade level?**

Yes	1	**GO TO QUESTION 6**
No	2	**GO TO QUESTION 6**
Unable to assign a grade level to score	3	**GO TO QUESTION 6**
No reading score available from 91-92	4	**SKIP TO QUESTION 7**

ALSO RECORD ANSWER, VERBATIM _____

_____

6. **What was that score? (WRITE IN BELOW)**

_____

IF BELOW EIGHTH GRADE, SKIP TO Q9. IF EQUAL TO OR HIGHER THAN EIGHTH GRADE, SKIP TO Q9. IF UNABLE TO ASSIGN A GRADE LEVEL TO THE SCORE, GO TO Q7.

7. **Do you feel that (STUDENT) is capable of completing a questionnaire designed for students who read Spanish the eighth grade level?**

Yes	1
No	2

ALSO RECORD ANSWER, VERBATIM _____

_____

_____

NOW SKIP TO QUESTION 9

8. **Is (STUDENT) a native speaker of any language other than English or Spanish?**

Yes	1	--->	**What language?** _____
No	2		

9. **Does (STUDENT) suffer from any behavior disorder, severe cognitive deficit, or severe physical impairment that would make it necessary for one to use extraordinary measures to administer the questionnaire, such as oral administration versus self-administration, a large print or Braille version of the questionnaire, or other extraordinary special assistance?**

Yes	1	**GO TO QUESTION 10**
No	2	**SKIP TO QUESTION 12**

10. **Please specify the behavior disorder, severe cognitive deficit, or physical impairment:**

RECORD ANSWER, VERBATIM _____

_____

_____

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11. **Please specify the extraordinary measures that would be needed to administer the questionnaire:**

RECORD ANSWER, VERBATIM _____

_____

_____

_____

12. **In what grade is (STUDENT)?**

GRADE: |__|__|

Not assigned a grade-level . . 1

13. **What is (STUDENT'S) sex?**

Male 1

Female 2

14. **Of the following choices, which best describes (STUDENT)? (CIRCLE ONE)**

Asian or Pacific Islander 1
Hispanic, regardless of race 2
Black, not of Hispanic origin 3
White, not of Hispanic origin 4
American Indian or Alaskan Native . . 5

15. **What are his/her home phone number, address, and parents' names, according to your most recent records?**

ADDRESS _____

CITY _____ STATE _____ ZIP CODE |__|__|__|__|__|

MOTHER/FEMALE GUARDIAN'S NAME _____

FATHER/MALE GUARDIAN'S NAME _____

PHONE NUMBER (_____)_____

16. **Finally, I would like to make sure that I have the correct address for your school.**

ADDRESS _____

CITY _____ STATE _____ ZIP CODE |__|__|__|__|__|

PHONE NUMBER (_____)_____

ADMINISTER ELIGIBILITY SCREENER FOR NEXT STUDENT, OR, IF NO MORE STUDENTS, THANK CONTACT.

NELS:88 2FU: FOLLOWBACK STUDY OF EXCLUDED STUDENTS **NORC 4521**
STUDENT ENROLLMENT STATUS SCREENER 3/92
HOME CONTACT

Use this screener to:

1. verify the enrollment status and confirm the dropout/dropin dates of sample members reported to be **Phase One-Two dropouts. START AT QUESTION 1.**

2. verify the enrollment status and confirm the dropout/dropin dates of sample members reported to be **Phase Three dropouts. START AT QUESTION 7. (IF A PHASE ONE-TWO AND PHASE THREE DROPOUT, START AT QUESTION 1.)**

3. determine the current enrollment status of and the school most recently attended by BYI's who were not enrolled in school as of the First Follow-Up. **START AT QUESTION 7.**

DATE: / /92

FI NAME: _____ FI ID: |__|__|__|__|__|__|

STUDENT ID: |__|__|__|__|__|__|__|

STUDENT NAME: _____

CONTACT NAME: _____

IF NOT SAMPLE MEMBER, RELATION TO SAMPLE MEMBER: _____

ASK TO SPEAK TO THE STUDENT (OR PARENT/GUARDIAN--MODIFY QUESTIONS AS NECESSARY)

A. Hello, this is _____ calling from the National Opinion Research Center at the University of Chicago. I'm calling regarding the Second Follow-Up to the National Education Longitudinal Study of 1988. We are currently following up on some of our sample members, and I'd like to ask you a few questions about your enrollment in school.

1. **Were you out of school for a month or more for a reason other than illness or vacation between March 1, 1991 and December 15, 1991?**

   Yes . . . . . 1 **SKIP TO QUESTION 4** (SAMPLE MEMBER IS A PHASE ONE-TWO DROPOUT)

   No . . . . . 2 **GO TO QUESTION 2**

2. **Your school records from (SCHOOL) indicate that you first left that school in (DROPOUT DATE REPORTED BY SCHOOL). Did you transfer to another school, and if so, when?**

   Yes . . . . . 1 --> **TRANSFER DATE:** |__|__|-19|__|__| --> **GO TO QUESTION 3**

   No . . . . . 2 **RECORD BELOW WHAT THE STUDENT WAS DOING, THEN SKIP TO Q7**

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3. **What is the name and location of the school to which you transferred?**

NAME OF SCHOOL: _____ PIN: |__|__|__|__|__|__|__|__|

CITY: _____ STATE: _____

SAMPLE MEMBER IS A PHASE ONE-TWO STUDENT. SKIP TO QUESTION 7.

4. **During which month and year did you first leave school for a month or more for reason other than illness or vacation?**

|__|__| - 19 |__|__| **(EARLIEST DROPOUT DATE)**
MONTH YEAR

5. **Did you return to school, and if so, during which month and year?**

Yes . . . . . 1 **DROP-IN DATE:** |__|__| - 19 |__|__| **–> GO TO QUESTION 6A**
MONTH YEAR

No . . . . . 2 **SKIP TO QUESTION 8** (SAMPLE MEMBER IS A PHASE THREE DROPOUT)

6A. **Did you leave school again for a month or more at some later point, and if so, when?**

Yes . . . . . 1 **DROPOUT DATE:** |__|__| - 19 |__|__| **–> GO TO QUESTION 6B**
MONTH YEAR

No . . . . . 2 **SKIP TO QUESTION 8** (SAMPLE MEMBER IS A PHASE THREE STUDENT)

6B. **Did you return to school, and if so, during which month and year?**

Yes . . . . . 1 **DROP-IN DATE:** |__|__| - 19 |__|__| **–> COLLECT REMAINING DROPOUT/IN DATES, THEN SKIP TO QUESTION 8.**
MONTH YEAR

No . . . . . 2 **SKIP TO QUESTION 8** (SAMPLE MEMBER IS A PHASE THREE DROPOUT)

7. **Are you currently attending school?**

Yes . . . . . 1 **GO TO QUESTION 8**

No . . . . . 2 **GO BACK TO QUESTION 4** (SAMPLE MEMBER IS A PHASE THREE DROPOUT)

8. **What is the name and location of the school you are currently attending/most recently attended?**

NAME OF SCHOOL: _____ PIN: |__|__|__|__|__|__|__|__|

CITY: _____ STATE: _____

NOW GO TO PARAGRAPH B

B. Thank you very much for your assistance. Another representative from the National Opinion Research Center may be contacting you shortly about NELS:88.